

Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

1. (Currently Amended) A wireless base station, configured to connect to a backbone network, the wireless base station comprising:

a first communication device configured to receive downlink data frames from a wireless network control device and transmit uplink data frames to the wireless network control device;

a second communication device configured to transmit downlink wireless signals to a subscriber unit and receive uplink wireless signals from the subscriber unit;

a channel processing device configured to process downlink data frames into downlink wireless signals and process uplink wireless signals into uplink data frames;

a signal distribution unit configured to selectively allocate/distribute downlink data frames and uplink wireless signals associated with the subscriber unit to the channel processing device of the wireless base station for ~~processing~~, processing and to another wireless base station for ~~processing~~, processing, and to distribute uplink wireless signals associated with the subscriber unit received by the second communication device to the channel processing device of the wireless base station for processing and the another wireless base station for processing; and

a third communication device configured to communicate with the another wireless base station, wherein the signal distribution unit comprises:

a forwarding controller configured to transmit a part of the downlink data frames and uplink wireless signals ~~allocated/distributed~~ to the another wireless base station for processing to the another wireless base station and receive corresponding processed downlink wireless signals and uplink data frames from the another wireless base station, through the third communication device, and to transmit a part of the uplink wireless signals distributed to the

another wireless base station for processing to the another wireless base station and receive corresponding processed uplink data frames from the another wireless base station, through the third communication device; device, wherein the second communication device is configured to transmit the received processed downlink wireless signals to the subscriber unit.

2. (Previously Presented) The wireless base station of claim 1 wherein the forwarding controller is further configured to transmit frame timing information relating to the uplink wireless signals or downlink data frames transmitted to said another wireless base station to said another wireless base station.

3. (Previously Presented) The wireless base station of claim 2 wherein said frame timing information is the wireless base station local frame timing and cell system frame timing information.

4. (Previously Presented) The wireless base station of claim 1 wherein the forwarding controller is further configured to advance a corresponding transmission by a time amount greater than or equal to a round trip transmission delay between said wireless base station and said another wireless base station, relative to frame timing relating to the uplink wireless signals or downlink data frames transmitted to said another wireless base station.

5. (Previously Presented) The wireless base station of claim 1 wherein the forwarding controller is further configured to transmit the uplink wireless signals and downlink data frames to said another wireless base station, and receive corresponding downlink wireless signals and uplink data frames from said another wireless base station.

6. (Previously Presented) The wireless base station of claim 5 wherein said uplink wireless signals and said downlink data frames transmitted by the forwarding controller belong to a same physical channel.

7. (Previously Presented) The wireless base station of claim 1 wherein the forwarding controller is further configured to exchange control signaling with said another base station.

8. (Previously Presented) The wireless base station of claim 7 wherein the control signaling comprises channel processing resource query, allocation control, establishment, modification and release operating commands.

9. (Previously Presented) The wireless base station of claim 1 wherein the another base station is configurable, and said forwarding controller is further configured to perform transmission and reception to and from the configured another base station.

10. (Previously Presented) The wireless base station of claim 9 wherein said another wireless base station's configuration is decided by said wireless network control device, or said wireless base station, or said another wireless base station, or a third party wireless base station, or through the negotiation between wireless base stations.

11. (Currently Amended) A wireless communication system, comprising:
a plurality of base stations; stations configured to connect to a backbone network;
and
a wireless network control device, at least a first base station of the plurality of base stations comprising:

a first communication device configured to receive downlink data frames from the wireless network control device and transmit uplink data frames to the wireless network control device;

a second communication device configured to transmit downlink wireless signals to a subscriber unit and receive uplink wireless signals from the subscriber unit;

a channel processing device configured to process downlink data frames into downlink wireless signals and process uplink wireless signals into uplink data frames;

a signal distribution unit configured to ~~selectively allocate~~ distribute downlink data frames ~~and uplink wireless signals associated with the subscriber unit~~ to the channel processing device of the first base station for ~~processing~~ and to processing and a second base station of the plurality of base stations for ~~processing~~; processing and to distribute uplink wireless signals associated with the subscriber unit received by the second communication device to the channel processing device of the wireless bases station for processing and to the second base station for processing; and

a third communication device configured to communicate with the second base station, wherein the signal distribution unit comprises:

a forwarding controller configured to transmit a part of the downlink data frames ~~or uplink wireless signals allocated~~ distributed to the second base station for processing to the second base station and receive corresponding processed downlink wireless signals ~~or uplink data frames~~ from the second base station, through the third communication device, and to transmit a part of the uplink wireless signals distributed to the second base station for processing to the second base station and receive corresponding processed uplink data frames from the second base station, through the third communication device, wherein the second communication device is configured to transmit the received processed downlink wireless signals to the subscriber unit. ~~device.~~

12. (Previously Presented) The base station system of claim 11 wherein the forwarding controller is further configured to transmit frame timing information relating to the uplink wireless signals or downlink data frames transmitted to said second base station to said second base station.

13. (Previously Presented) The base station system of claim 12 wherein said frame timing information is the wireless base station local frame timing and cell system frame timing information.

14. (Previously Presented) The base station system of claim 11 wherein the forwarding controller is further configured to advance a corresponding transmission by a time amount greater than or equal to a round trip transmission delay between said first base station and said second base station, relative to frame timing relating to the uplink wireless signals or downlink data frames transmitted to said second base station.

15. (Previously Presented) The base station system of claim 11 wherein the forwarding controller is further configured to transmit the uplink wireless signals and downlink data frames to said second base station, and receive corresponding downlink wireless signals and uplink data frames from said second base station.

16. (Previously Presented) The base station system of claim 15 wherein said uplink wireless signals and said downlink data frames transmitted by the forwarding controller belong to a same physical channel.

17. (Previously Presented) The base station system of claim 11 wherein the forwarding controller is further configured to exchange control signaling with said second base station.

18. (Previously Presented) The base station system of claim 17 wherein said control signaling comprises channel processing resource query, allocation control, establishment, modification and release operating commands.

19. (Previously Presented) The base station system of claim 11 wherein said second base station is configurable, and said forwarding controller is further configured to perform transmission and reception to and from the configured second base station.

20. (Previously Presented) The base station system of claim 19 wherein said second base station's configuration is decided by said wireless network control device, or said

first base station, or said second wireless base station, or another base station, or through the negotiation between base stations.

21. (Currently Amended) A communication method, comprising:

receiving downlink data frames from a wireless network control device through a first communication device of a wireless base station; station connected to a backbone network;

transmitting uplink data frames to the wireless network control device through the first communication device;

transmitting downlink wireless signals to a subscriber unit through a second communication device of the wireless base station;

receiving uplink wireless signals from the subscriber unit through the second communication device;

selectively allocating, distributing, through a signal distribution unit of the wireless base station, processing of downlink data frames and uplink wireless signals associated with the subscriber unit, to a channel processing device of the wireless base station; station for processing and to another wireless base station; station for processing, and processing of uplink wireless signals associated with the subscriber unit received by the second communication device to the channel processing device of the wireless base station for processing and to another wireless base station for processing;

processing the downlink data frames allocated-distributed to the channel processing device into downlink wireless signals and processing the uplink wireless signals allocated to the channel processing device into uplink data frames in the channel processing device;

transmitting a part of the downlink data frames and the uplink wireless signals allocated-distributed to the another wireless base station to the another wireless base station through a third communication device of the wireless base station; and

receiving corresponding processed downlink wireless signals or corresponding processed uplink data frames from the another wireless base station through the third

~~communication device~~, wherein the received corresponding processed downlink wireless signals are transmitted to the subscriber unit by the second communication device.

22. (Currently Amended) A communication method in a wireless base station system, the wireless base station system comprising a first base station, ~~station and~~ a second base station connected to a backbone network and a wireless network control device, the first base station comprising a first communication device, a second communication device, a channel processing device and a signal distribution unit, the method comprising, in the first base station:

receiving downlink data frames from the wireless network control device through the first communication device;

transmitting uplink data frames to the wireless network control device through the first communication device;

transmitting downlink wireless signals to a subscriber unit through the second communication device;

receiving uplink wireless signals from the subscriber unit through the second communication device;

~~selectively allocating, distributing,~~ through the signal distribution unit, processing of downlink data frames and uplink wireless signals associated with the subscriber unit; to the channel processing device of the first base station, ~~station and~~ to the second base station, ~~station and~~ processing of uplink wireless signals associated with the subscriber unit received by the second communication device to the channel processing device of the first base station for processing and to the second base station for processing;

processing the downlink data frames ~~allocated~~ distributed to the channel processing device into downlink wireless signals and processing the uplink wireless signals ~~allocated~~ distributed to the channel processing device into uplink data frames in the channel processing device,

wherein the first base station further comprises a third communication device for communicating with the second base station, and the method further comprises:

in the first base station, transmitting a part of the downlink data frames or the uplink wireless signals ~~allocated-distributed~~ to the second base station to the second base station through the third communication device; and

in the first base station, receiving corresponding processed downlink wireless signals or corresponding processed uplink data frames from the second base station through the third communication ~~device- device~~, wherein the received corresponding processed downlink wireless signal are transmitted to the subscriber unit by the second communication device.

23. (Currently Amended) The wireless base station of claim 1 wherein the signal distribution unit is configured to selectively ~~allocate-distribute~~ downlink data frames and uplink wireless signals to a third wireless base station for processing and the forwarding controller is configured to transmit downlink data frames and uplink wireless signals ~~allocated distributed~~ to the third wireless base station for processing to the third wireless base station and receive corresponding downlink wireless signals and uplink data frames from the third wireless base station, through the third communication device.

24. (Currently Amended) The system of claim 11 wherein the signal distribution unit is configured to selectively ~~allocate-distribute~~ downlink data frames and uplink wireless signals to additional base stations of the plurality of wireless base stations for processing and the forwarding controller is configured to transmit downlink data frames or uplink wireless signals ~~allocated-distributed~~ to the additional base stations to the respective base stations and receive corresponding downlink wireless signals or uplink data frames from the respective base stations, through the third communication device.